

National Advisory Committee

In 2004, a National Advisory Board (NAB) comprised of members with broad expertise in ocean-related matters was established to advise both the COSEE Council and NSF. Initially, the NAB consisted of nine members, four of whom continue to serve (Gordon Kingsley, George Matsumoto, Sally Goetz Shuler, and Carolyn Randolph). The NAB was later renamed the National Advisory Committee (NAC) to clarify that it has advisory responsibilities only, not the formal oversight character of a corporate board.

The NAC provides recommendations aimed at improving the effectiveness of the COSEE Network. It has a wide range of perspectives and expertise, including research scientists, officers of scientific societies and professional organizations, formal and informal science educators, state departments of education staff, professional program evaluators, ocean-related foundation staff, and ocean-related industry-business-technology leaders.

The NAC currently meets twice per year, during the annual Network Meeting (first week of May) and in conjunction with a COSEE Council meeting (first week of November).

Overview of NAB/NAC meetings

Capsule summaries of annual meetings are provided in this section. Recommendations to COSEE and NSF resulting from the meetings are contained in meeting notes, which are provided in a following section.

2004

The first joint meeting of the National Advisory Board (NAB) and the COSEE Council was held on April 13, 2004, in Washington, D.C., one year after the initial COSEE organizational meeting. Eight of the nine Board members attended the meeting. The Board was briefed on accomplishments during the first year of COSEE activity.

The Board made four recommendations for Council action: 1) define S.M.A.R.T. (specific, measurable, attainable, realistic, tangible) goals (www.topachievement.com/smart.html), 2) establish a more outward looking governance and oversight structure, 3) expand NAB membership to tap into business and foundation expertise, and 4) hire an Executive Director to coordinate, integrate, and advocate for COSEE nationally.

The Board urged COSEE to become a *network*, rather than a collection of Centers, as soon as possible. This meeting helped clarify the COSEE vision and set the stage for community work that led to the first COSEE Strategic Business Plan.

2005

The NAB's next meeting with the Council was on April 5, 2005. Council members and Center PIs briefed the Board on the Network Strategic Business Plan and progress made during COSEE's second year. The NAB's second set of recommendations praised the Network for "remarkable progress," but focused on the need for COSEE to shift its attention and priorities

away from the predominantly internal focus implicit in the first Plan and adopt a more proactive, externally-focused posture.

At the COSEE Council meeting the next day, Craig Strang reported on this Board perspective (and a companion list of “specific recommendations for action”), and mobilized the Council to follow the Board’s advice to “jump start” updating of the Plan over the next two days.

In May, at the annual PI meeting, the updated Plan was presented to the Network. In spring, 2005, two NAB members served on the Search Committee for the COSEE Executive Director position.

2006

In early spring, the NAB expanded to twelve members to tap into a broader range of expertise. COSEE hosted a workshop (May 6-8, 2006) focused on extending the strategic plan with quantifiable outputs and outcomes. Six of the twelve NAB members attended, either in person or via conference call.

The presence of a new NAB “cohort” resulted in a meeting that focused primarily on informing new NAB members about COSEE and the rationale for developing what had become known as the Blueprint. The Board was supportive of Blueprint development and reaffirmed the necessity of better defining COSEE’s niche from an outsider’s perspective before launching extensive development and fund-raising work.

2007

NAB discussions in panel format focused on three challenges: making governance more transparent and effective; engaging scientists in an increasingly competitive funding climate; and expanding COSEE’s role in ocean literacy. Board attendance was 6 out of 11. Sally Goetz Shuler was affirmed as the first Chair of the COSEE advisory structure by a unanimous voice vote.

2008

The 2008 meeting was brief; the discussions focused on the need for the NAC to be given more time, more information, and more responsibility. The NAC members all expressed an interest in working to ensure the success of COSEE.

2009

At its meeting in May, 2009, the NAC examined COSEE’s by-laws and recommended some changes. It was decided that NAC officers serve for one year, that NAC members should serve a three year term, and that the process should be restarted to ensure that turnover of NAC members is not detrimental. It was decided to reconvene the NAC, starting with new terms for all extant members. Drawing names randomly, the 12 members were assigned an end date of May 2010, 2011, or 2012 for their current term, with an option to be nominated for a second three-year term. This would ensure that approximately 1/3 of the board would be rotated off each year.

It was also clear that some of the NAC members were not familiar enough with COSEE. To address this issue, each NAC member has “adopted” one or more of the COSEE Centers, and has

the responsibility of learning as much as possible about that Center (see list below of past and current NAB/NAC members).

Current NAC members and their adopted Center are:

George Matsumoto - COSEE-Alaska (*Nora Deans, North Pacific Research Board*)

Dan Whaley - COSEE-California (*Craig Strang, UC Berkeley*)

Carolyn Randolph - COSEE-Central Gulf of Mexico (*Sharon Walker, Scott Marine Education Center and Aquarium*)

Sara Espinoza - COSEE-Coastal Trends (*Laura Murray, U of Maryland Center for Environmental Science*)

Gordon Kingsley - COSEE-Great Lakes (*Rosanne Fortner, Ohio State University*)

Brandon Jones - COSEE-Networked Ocean World World (*Janice McDonnell, Rutgers University*)

Cindy Van Dover - COSEE-New England (*Billy Spitzer, New England Aquarium*)

Sally Goetz Shuler - COSEE-Ocean Learning Communities (*Phil Bell, University of Washington*)

Jean Egmon - COSEE-Ocean Systems (*Annette deCharon, Darling Marine Center, University of Maine*)

Kelly Kryc - COSEE-Pacific Partnerships (*Jan Hodder, Oregon Institute of Marine Biology*)

Mike Loudin & Carolyn Randolph - COSEE-SouthEast (*Lundie Spence, South Carolina Sea Grant Consortium*)

Carroll Hood - COSEE-West (*Linda Duguay, University of Southern California*)

NAC members have also taken on the added task of joining the COSEE working groups in order to be able to provide more substantive support and advice.

2010

The National Advisory Council would like to express its appreciation for the outstanding effort that the COSEE centers, the CCO, the program evaluators, scientists, educators, and many more that have all contributed an impressive amount of time and effort in getting ready for the upcoming Community Workshop and the Decadal Review. The NAC is impressed that the various proposed COSEE tasks and objectives are mostly still being met despite this added effort. We welcome the addition of three new COSEE Centers (COSEE – Florida, COSEE-TEK, and COSEE – OCEANS).

We would also like to acknowledge the efforts of three COSEE Centers that have not been renewed (COSEE – Central Gulf of Mexico, COSEE Coastal Trends, and COSEE Great Lakes). The NAC is pleased at how the CCO is working with these three Centers to help them find some additional funding and hope that they will be able to remain within the COSEE Network after their no-cost extension period expires.

We would like to express our deepest appreciation to Don Elthon for his leadership and guidance during his tenure as NSF Program Director and welcome Michelle Hall as the new NSF Program Director overseeing COSEE. We look forward to working with Michelle and Lisa Rom over the next few years as COSEE moves into the second decade of funding.

The NAC, NSF, and the CCO had an excellent discussion centering on the America Competitiveness Council and how COSEE and NSF might address the budget limitations imposed by the ACC/OMB – including the recent NSF response to OMB. We also discussed the National Network Evaluation and the some issues about COSEE in general.

Lisa Rom went over the 2010-2011 COSEE budget and the results from the 2010 response to the COSEE Request for Proposals. Michelle Hall discussed the present status of the Decadal Review and the National Network Evaluation. Both of these topics resulted in extensive discussions and some NAC Recommendations.

Billy Spitzer went over all the recommendations from November, 2010 and discussed either the action taken or why there was no action taken. And finally, it should be noted that nominations for the NAC are being solicited (for May) and any names (and justifications) should be forwarded to Carolyn Randolph by December 1st, 2010 (chair of the Nominations Committee).

Past and current NAB/NAC members

Ted Beattie, President/CEO, John G. Shedd Aquarium. Ocean Commission member. 3/04-12/07. (Absent 05, 06, 07)

Daniel Baden, Professor and Director, Center for Marine Science Research, University of North Carolina at Wilmington. Served as Treasurer on the Executive Committee of CORE. 5/06-4/08.

Andrew Clark, President, Maritime Communications Division, Harris Corporation. 3/06-12/08. (Absent 06, 07)

Robert Corell, former Assistant Director, Geosciences, National Science Foundation. 5/08-5/10.

Charles R. Fisher, Jr., Professor of Biology, Pennsylvania State University. Headed RIDGE 2000 office for three years. 3/04-5/08. (Absent in 2005 due to conflict of interest)

Eric J. Jolly, President, Science Museum of Minnesota. 3/04-12/07. (Absent 05, 06)

Patrick T. Hagan, Research Associate, King and Associates, Inc. Research in environmental economics and policy. Directed the development and public relations arm of the Bermuda Biological Station for Research.

Jill Karsten, Education and Outreach Manager, American Geophysical Union. 3/04-12/07. (Resigned in 2005 due to a move to NSF)

Robert L. Lichter, Principal, Merrimack Consultants LLC in Decatur, Georgia. University educator/researcher (Hunter College) and administrator (SUNY Stony Brook). 5/06-4/08. (Resigned in 2007)

Mark St John, Inverness Research Associates. Evaluation expertise. 3/04-12/06. (Absent all meetings)

Carroll Hood, Chief Architect for Global Earth Observing System of Systems (GEOSS), Raytheon. Served on the Southeast Coastal Ocean Observing Regional Association (SECOORA) Board of Directors and co-chairs the SECOORA Data Management and Communications Program Committee. -5/11.

George L. Matsumoto, Senior Education and Research Specialist, Monterey Bay Aquarium Research Institute, 3/04-5/11.

Carolyn Thoroughgood, Vice Provost for Research, University of Delaware. PI of the 2002 COSEE CCO proposal to NSF. PI and advisor to the CCO until 2005. 5/06-5/10. (Absent 5/09, 11/09, 5/10)

Cindy van Dover, Director of the Marine Laboratory and Chair of the Division of Marine Science and Conservation, Duke University. Deep sea biologist with expertise in the ecology of chemosynthetic ecosystems. -5/11.

Sara Espinoza, Manager, National Environmental Education Foundation's Earth Gauge Program. Works with broadcast meteorologists across the U.S. and at The Weather Channel to incorporate environmental information into the weathercast. 5/09-5/12.

Gordon Kingsley, Associate Professor, Georgia Tech University. Social science and public policy research. GK12 evaluation. 3/04-5/12.

Kelly Kryc, Program Officer, Gordon and Betty Moore Foundation and Marine Microbiology Initiative. 5/09-5/12.

Carolyn Randolph, former Assistant Executive Director, South Carolina Education Association. Past President, NSTA. 3/04-5/12. (Absent 2007)

Jean Egmon, Executive Director, Ford Center Network and Managerial Economics & Decision Sciences Faculty, Kellogg Graduate School of Management, Northwestern University. Director, Complexity in Action Network, Division of the Northwestern University Institute on Complex Systems, 5/10-5/13.

Sally Goetz Shuler, Executive Director, National Science Resources Center, Smithsonian Institution. 3/04-5/13. (Attended 11/09, 5/10)

M. Brandon Jones, Acting STAR/GRO Fellowships Team Lead U.S. EPA/ORD/NCER. Adjunct professor of Environmental Science, Trinity University, Washington, D.C. -5/13.

Mike Loudin, Manager of Global Geoscience Recruiting and Early Career Development/ExxonMobil. -5/13.

Dan Whaley, Founder and CEO of Climos, a San Francisco company exploring geoscience mechanisms to mitigate atmospheric CO₂. -5/13.

Notes from NAB/NAC meetings and recommendations by year

April 13, 2004

This document represents an attempt to combine comments from the NAB immediately following the April 13th meeting as well as comments from two members who had to leave the meeting early. NAB members have only had a limited time to review this document and some members may provide some amendments to this document at a later date. It is gratifying to note that many of the concerns below have already been addressed in the COSEE Draft Strategic Plan document that was generated following the NAB meeting in April.

The following represents a few of the major recommendations from the NAB at this time. There were a number of questions (some of which were answered) generated during the meeting, these are appended below for consideration by the COSEE centers. Our recommendations should be considered transitory until the Ocean Commission recommendations have been revealed and their implications considered.

Establish 3-4 Common Goals and Priorities

The National Advisory Board (NAB) feels strongly that the COSEE network should function as a network. This is not to say that all centers should be asked to march in "lock-step", you should not. Each center must benefit and flourish as a result of the expertise of its PI's, the resources of its partners, and the culture of the its region. However you must "think nationally and act locally". This was emphasized during the meeting with the following phrase: "Common Goals and Regional Strategies".

You can only do so if the Council/CCO has the budget, personnel, and authority to conduct the business of the network. It has none of these at this time. In addition to the very important roles of overseeing and monitoring the attainment of your national goals, it should also serve to oversee and coordinate some of the nitty gritty details of your strategies. There will also be savings in resources with better coordination and oversight.

The concept to be considered here is "Open Access". This means that anything developed at one COSEE center should be easily transferable (if desired) to other COSEE sites. Three areas that would benefit from this more coordinated effort (but not the only ones):

Workshops and other activities to "assesses needs" of scientists and educators were conducted independently by various centers: I hope these were coordinated (between centers) and the results disseminated. in the future, such activities should be. Other activities of import to all centers (such as "defining ocean literacy" for example), should have input from all centers. The point here is coordination of a subset of the individual center activities, and dissemination of import products immediately. The Council should have the resources and authority to oversee and coordinate work/activities of interest to all centers.

Website design and associated details: Why are all centers doing their own? Why not a unified design and framework, with personnel and code available at the national office for all centers to access? Get this effort centralized, and well supported, it is important to the local and national efforts. (Each center will still need web resources, but not nearly as much as otherwise). A common template can be produced (at any center) but then all centers should be using the same template to provide a more uniform and user-friendly format. This is important for the upper level pages (as well as links to each other), but the lower level pages should have some regional flexibility with the look and feel.

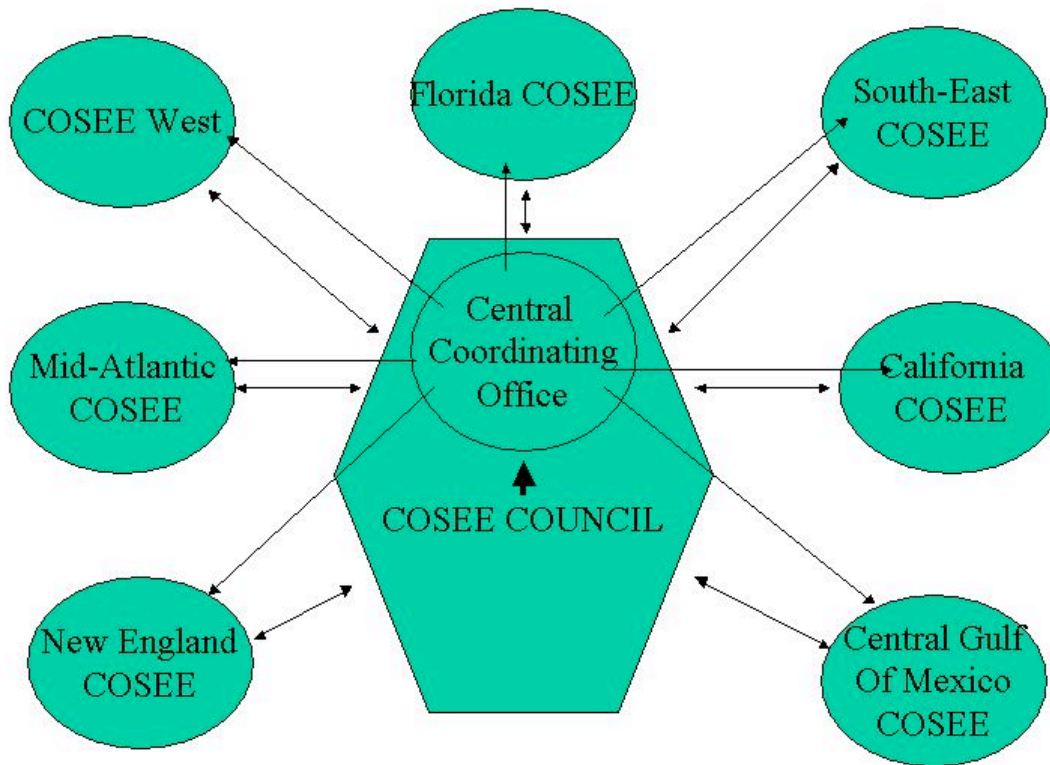
Evaluation: this must be coordinated and some degree of conformity imposed. Many centers are conducting similar activities and you must be able to see what works and what does not and why one particular workshop (for example) was more successful than another very similar workshop. This may be impossible to determine if comparing the evaluations is comparing apples and oranges. Not only are you likely wasting resources by having each center invent the wheel (rubric and instruments), but the wheels will be of different sizes/shapes and may not benefit the "network vehicle" as they should. This will not be fun or easy but is important.

Need to define a better oversight structure. The Council is made up of representatives of regional centers, but they may be a little "too inside" – may be difficult to consider the broader context or broader vision.

This one doesn't bother me too much (GIM) as I think that this is where the NAB may play a valuable role. The Council is where the work gets done. I don't think that we need more oversight in this area, but agendas, background material, decisions made, etc should be provided to the NAB so that we are able to weigh in with our thoughts.

Recommend adding a more independent Executive Director who is not a representative of a regional COSEE. This person would help with defining coordination, vision, and program identity, make connections to inside the beltway groups and resources. Need an Executive Director who is a visionary and advocate for the program.

(GIM) – I would view this role within the Central Coordinating Office. This comes back to the first point above where if COSEE is to serve as a network there needs to be the management, direction, and budget to make this happen. Since a CCO exists already, it doesn't make sense to generate another level above the CCO/COSEEs. This might mean redefining the role of the CCO (with the Council's approval) to a more tiered arrangement rather than peer. I can envision something along the following structure.....



where each regional COSEE has representation on the COSEE Council. The Council will then make the network decisions, convey this information to the CCO which is responsible for ensuring that each regional COSEE has the resources necessary to accomplish the decision. This doesn't relieve the regional COSEE from having to find resources as the first option would be to use available resources within the regional COSEE before CCO resources are utilized. The "Executive Director" would perhaps be somebody like Dr. Sue Cook within the CCO who has the vision and contacts to make things happen!

Need to reassess the national advisory board constituency and be sure to have connections to broader spheres of influence; deliberate membership – include foundation rep, industry rep. Consider how to "catch" or create the next wave of opportunities.

Media outreach is essential and there should be both a regional strategy and a national strategy developed and ready to go. For example, the whale on the east coast represented an ideal outreach story for the east coast COSEE network (the west coast had the wayward sea lion). There should be a proactive effort to provide media outlets with information, contacts, and audiovisual material to make the stories happen. At a national level, the perfect example will be the release of the Ocean Commission report where a coordinated outreach effort would be useful. The two are not mutually exclusive.

We also need to be poised to take advantage of existing and future efforts (e.g. ocean observatories, AZA, NASA, NSTA, NMEA, SCAMPI, and many more acronyms). We also need to be ready to become proactive rather than reactive. Let's not sit and wait for opportunities to knock, we can make our own!

Build in a process for marketing their strategy to the next level of stakeholders (beyond their own COSEE partners).

It is important to have a common mission (as well as the common goals).

Common mission statement might include words like: awareness, engagement, capacity, continuity, and coherence

Questions generated during the April 13th meeting:

How would you characterize yourselves in 3-5 years from now?

What are your goals? And are they smart goals?

What are your strategies?

How are you connecting to research about best practices (about how students learn)?

What are your endpoints? Project Management is important – milestones, etc.

It is important and timely to go back and address your goals against the original COSEE workshop report to ensure that they are appropriate and that we are not missing anything.

How are you reaching minorities and how do you assess success?

It is important to recruit new members into the ‘choir’. How will you reach these new members and how will you handle those members that can’t ‘sing’?

How are you planning on scaling up?

Ocean Literacy – how is the New England effort being vetted? How is it different from the existing National Geographic effort? Is it being tied to National Science Education Standards?

And why is it being done if there are already efforts out there?

April 5, 2005

Engaging Scientists & Educators

Some editorial suggestions

Dissemination: Get Ready for Prime Time

Develop Case Studies

Track Data on proposals

Involve Business and Industry

National Director Search

Hire someone really good

Reviewed Applications, narrowed pool to 5

Consider National COSEE Fellowship to assist Director

Underrepresented Audiences

Don’t delay, look for near term solutions

Need aggressive strategies, strong role models

Engage NSTA, NOAA, Earth Sci Week

Consider Intern Program

Engage Diverse Leaders as Partners

Ocean Literacy

Engage Curriculum Developers: BSCS, EDC, NSRC, TERC, LHS

Engage Professional Developers

Work with ASTC

Advocacy in Education, Business/Industry

Disseminate Fast! Carpe Diem!!

Network priorities

Disseminate Ocean Literacy Concepts Now!

Get thee to the Aqua Box!

Partner with Industry, Diversify Support

Develop Strategy/Training for education of business, scientists, political leaders

Hire that Director! Focus on Sustainability

Given grim climate, move faster...

2006

[notes missing]

June 21, 2007

I. COSEE's Role in the Broader Context of STEM Research and Education

Recommendation 1: Work with the NAB and other appropriate leaders within COSEE and beyond to help the NAB gain a better overall understanding of COSEE and in turn help the Network better understand and incorporate the benchmarking COSEE's initiatives and programs so that its contributions to the larger STEM education enterprise can be assessed, enhanced, and expanded.

Recommendation 2: Work with the NAB to select several national programs against which COSEE can be benchmarked. Determine how COSEE's work and Indicators of Excellence (May 2005) measure up to their standards of excellence. Initiate plans with these programs' leaders to identify lessons learned and address areas that need to be strengthened.

II. COSEE Governance

Recommendation 3: Create a governance committee that includes a balance of internal and external expertise, including representation from appropriate COSEE leadership and the NAB. A committee chair should be selected from an organization external to COSEE.

Recommendation 4: Request that the governance committee present to the Council an optimal model for governance, including: pros/cons; expenses and appropriate coordination between money, responsibility, and authority; necessary personnel and their roles; implementation plans; and, necessary professional development for the effective implementation of this model. This should occur no later than October 2007.

Recommendation 5: As part of the governance review, work with the NAB to select several organizations with missions or governance models of interest. Interview these organizations' leaders as case studies in governance.

III. Organizational Funding, Resources, and Sustainability

Recommendation 6: Revisit the COSEE Marketing Plan as developed and presented by the CCO (Spring 2006). Work with CORE's communications staff and the NAB to complete its development and approval by Fall 2007.

Recommendation 7: Utilize the NAB and advisory boards for individual Centers to assist in the final development of a national COSEE marketing and fundraising packet by spring 2008, including a short list of possible funders at the national level and an initial contact with appropriate personnel in those organizations/agencies.

November 5, 2008

- Reported out by Dan Whaley
- advisory committee structure & meetings
- we're really impressed by COSEE, what you've accomplished, your passion, your commitment and your unanimous desire to keep driving and improve
- Our role is simply to help enable this
- You clearly know what your vision is, and have addressed many of these issues fundamentally in the past.
- you've asked us to do the impossible
- too little time
- hear about past advisory boards, don't want to repeat these mistakes...
- Need a full day
- Need more independence
- Startup kit:
- What it would help to have in the future.... - Charge: What do you want from us? What is our role? Who are our predecessors (how can we improve)?
- NAC By laws - Exec summary of COSEE - COSEE Strategic Plan / Blueprint / Long term vision -- how has this changed? - Org structure
- Governance docs - COSEE Budget -- How does funding get distributed? Budgetary goals? Challenges? Projections? Funding cycles? sunset clause on funding?
- Center accomplishments / summary / - Key projects or initiatives underway - What is the structure of COSEE? What does it serve? - Who are the 'customers' of COSEE? - Whose education ultimately is enhanced by COSEE? Is it organized to be able to deliver this? - What was the reason for creating COSEE, what is its history? - Have there been any past assessments or ongoing evaluations reviews of COSEE? - Minutes from the last NAC meeting
- Regular reporting
- Briefing & synthesis from the network
- Evaluation committee briefing
- Programmatic & Generative components separately
- accomplishments

NAC Recommendations, November 2008

The NAC would like...

- Regular reporting
- Briefing and synthesis reports from the network and centers on a regular basis.
- Accomplishments, future plans, challenges.
- Input on discussion from NSF and NOAA.
- Use the NAC more strategically. How can COSEE target the NAC? How can you go seek the things that COSEE needs, money, access, and make sure that the people that are the shortest path to those items are on the NAC?
- Someone from LTER should be on the advisory committee.

Leadership and vision.

Recommendations:

- Leadership structure needs attention. Leadership investment in the network is less than the leadership than a Center. Leadership and vision needs attention. Time and resources need to be addressed.
- The NAC would like to engage the Council in a discussion about leadership.
- Recommend elements of the team, leaders from centers, CCO and from funding agencies. Sit down and talk about the leadership... sooner than later.

Funding sustainability. Planning for a sustainable organization needs to be of highest priority.

Recommendations:

- The current incentive base structure is helpful.
- The grant and RFP process needs to be aligned with the network goals that are articulated with the goals.
- Centers need to be more strategic to find more funding sources.
- More hard money from NSF. More hard money allocated to the Network itself.
- Opportunity to bring Private funding.

NAC has volunteered to...

- Have discussions on network leadership and investment
- Additional members that COSEE many need
- Sustainability and what that means
- Acting as a sounding board for making our case
- Assisting with fundraising and access
- Help with marketing and COSEE brand
- Review bylaws, need copies of the business plan and will review the business plan

COSEE needs to provide to the NAC...

- Start up kit
- Regular reporting



January 15, 2009

Dear National Advisory Committee Colleagues,

Thank you again for a very productive meeting at the Smithsonian Institution in November. As request by your committee, we are providing additional background materials on COSEE in the enclosed binder. In addition, we wanted to update you on our progress in addressing your recommendations from the meeting.

The following table summarizes your recommendations and our responses:

NAC Recommendation	Response
1. NAC needs more independent time to meet	NAC will meet for dinner followed by a full meeting day at the May all-Network meeting in South Carolina.
2. NAC needs a "startup" kit with background materials	See attached binder.
3. NAC needs regular reporting on COSEE activities	We will address this for the May NAC meeting.
4. COSEE needs to use the NAC more strategically	We hope that the March strategic business plan work session will be a good start on this.
5. Need additional attention to and investment in the COSEE network leadership structure	The new NSF supplemental funding opportunity (*see below) may increase the resources available for network level activities, more discussion is needed on this at the May NAC meeting.
6. Need attention to funding structure and sustainability	We will begin to address this at the March strategic business plan workshop.

*On 14-Nov-08 NSF announced a "Supplemental Funding" opportunity to all P.I.s and Co-PIs with active COSEE awards. Intended to support Network-level activities that "produce impact at the national scale,

advancing ocean sciences education

May 2009

Present: Sara Espinoza, Carroll Hood, Brandon Jones*, Gordon Kinglsey, Kelly Kryc, George Matsumoto, Carolyn Randolph, Cindy Van Dover, Dan Whaley*

Additional Presenters/Visitors: Don Elthon (NSF), Billy Spitzer (CCO), Gail Scowcroft (CCO), Annette deCharon (COSEE), Mark St. John (Inverness – National Evaluator)

******RECOMMENDATION: THE NAC RECOMMENDS THAT COSEE HOLD A WORKSHOP FOR IDENTIFYING EFFECTIVE PRACTICES; INTELLECTUAL LEGACY OF COSEE AND OTHER ORGANIZATIONS** – don't reinvent the wheel, generate a white paper summarizing what's out there already – literature survey. Start with the latter and use it to focus the workshop agenda - start with teacher professional development in the near term (can expand over time to include other activities). This workshop should be done soon – preferably before Sept. 1 so as to provide some much needed information for potential applicants for the new COSEE RFP. ****

******RECOMMENDATION:** Governance structure is critical for COSEE particular with the new goals and outcomes in the new strategic business plan. 'Network architecture' working group is needed and Carroll is interested in observing and providing input to this working group. **THE NAC RECOMMENDS THAT THIS GROUP BECOME ACTIVE IMMEDIATELY AND PROVIDE SOME STRUCTURE TO THIS IDEA BY SEPTEMBER 1, 2009 (IN TIME FOR THE RFP – IT MIGHT BE EARLIER OR LATER).** This architecture needs to build upon the strategic business plan. It is important to have this in time for the new NSF RFP. A discussion about center-based vision – how will the proposed center mesh with the network vision should be in the new RFP as well. Panel reviewers should be made aware of the importance of this issue. It might be useful to bring in visitors to this working group: e.g. from the astrobiology field – Carl Pilcher (lead for National Astrobiology Institute). ****

Enterprise architecture – we are trying to keep away from thinking of COSEE as a single organization – it's not. It's a distributed network, needs topology, roles and responsibilities, how the different parts work together. Right now it works mostly because of the heroic efforts of a few individuals. This will formalize the process and really set the stage for funding decisions.

****RECOMMENDATION: WE LIKE THE ONE-PAGERS BUT WOULD LOVE TO SEE PERHAPS ½ OF THE BACK PAGE BE LEFT FOR ACCOMPLISHMENTS (MAP REDUCED IN SIZE).**

****RECOMMENDATION: THE NAC WOULD ALSO LIKE TO BECOME MORE INVOLVED WITH THE WORKING GROUPS** as an observer, for example Gordon would like to be involved with the Evaluations and Sara, Brandon would like to be involved with the marketing/communications group, Carolyn, Brandon would like to be part of the Diversity group. This will help the NAC become more knowledgeable about COSEE and again, better ambassadors for the program.

****RECOMMENDATION: PLEASE PROVIDE THE NAC WITH THE NATIONAL EVALUATION PLAN STRATEGY.** We are concerned about the loss of effective practices and lessons learned from centers that are no longer funded and wonder if some of this can be captured in the National Evaluation Plan? Preserving the legacy of both effective practices and lessons learned is important. This may already be on the fileserver - The NAC would like to see a NAC button on website – should include documents in the startup binder as well as any and all evaluations (center and network) would be great. This may not be necessary if the documents are on the fileserver.

****RECOMMENDATION. COSEE SHOULD DECIDE HOW TO HANDLE THEIR GRADUATES. NOT ONLY FROM THE PRODUCTS AND METHODOLOGIES, BUT CONTINUED COSEE RECOGNITION FOR LEGACY PROGRAMS.**

****RECOMMENDATION: COSEE NEEDS TO GATHER STORIES OF SUCCESSFUL COLLABORATIONS TO SERVE AS EXAMPLES – GATHER, ARCHIVE, AND DISSEMINATE.**

Strategic Business Plan Framework

****RECOMMENDATION: REORDER THE OUTCOMES TO START WITH STRENGTHS****

**** Recommendation: change “best practices” to “effective practices and innovations”
NSF**

****RECOMMENDATION: WITH REGARD TO THE NEW THREE GOALS OF THE STRATEGIC BUSINESS PLAN, THESE SEEM TO BE NETWORK LEVEL ACTIVITIES SO THE NAC RECOMMENDS THAT THERE BE A SUFFICIENT AMOUNT OF FUNDS ALLOCATED TOWARD THE CCO COMMENSURATE WITH THE ROLES AND RESPONSIBILITIES AS DETERMINED IN THE YET-TO-BE FLESHED OUT NETWORK ARCHITECTURE. ****

November 4, 2009

National Advisory Committee (NAC)

Robert Corell*H. John Heinz III Center for Science, Economics and the Environment

Sara Espinoza National Environmental Education Foundation

Carroll Hood (Vice-Chair) Raytheon

M. Brandon Jones Environmental Protection Agency

Gordon Kingsley (Chair)¹ Georgia Institute of Technology

Kelly Kryc Gordon and Betty Moore Foundation

Mike Loudin ExxonMobil

George Matsumoto (Secretary) Monterey Bay Aquarium Research Institute

Carolyn Randolph National Science Teachers Association

Carolyn Thoroughgood¹ University of Delaware

Cindy L. Van Dover* Duke University

Dan Whaley Climos

*Participated via telephone

¹Absent

Observers and Guests

Don Elthon National Science Foundation

Lisa Rom National Science Foundation

Gail Scowcroft University of Rhode Island, National Central Coordinating Office

Billy Spitzer New England Aquarium

Specific Recommendations

NAC Recommendation 0911-01: NAC encourages COSEE to leverage the OSB/Smithsonian Institution relationship to increase exposure and advertising for a COSEE lecture series.

NAC Recommendation 0911-02: The NAC members would like to become more involved with the COSEE working groups as observers, which will help the NAC become more knowledgeable about COSEE and serve as better ambassadors for the program:

Evaluation Working Group: Gordon

Marketing/Communications Working Group: Sara and Brandon

Governance Working Group: Mike

Professional Development Working Group: George

Web Working Group: Carroll

Scientist Engagement Working Group: Cyndy

Diversity Working Group: Carolyn and Brandon

Strategic Business Plan Working Group: Sally and Carroll

Decadal Review Working Group: George and Kelly

NAC Recommendation 0911-03: The NAC recommends that the Strategic Business Plan Working Group continue as an operational/planning group.

NAC Recommendation 0911-04: NAC will form an ‘ad-hoc’ working group (Sally, Dan, Kelly, and Carroll) to really focus on fundraising. It will be an agenda item for the May 2010 network meeting. NAC feels that 2012 is too far away and that this is too important a topic to wait.

NAC Recommendation 0911-05: The Mission statement needs to be concise and inclusive. NAC suggests the following: *Engaging scientists and educators to transform ocean sciences education for all.*

NAC Recommendation 0911-06: NAC recommends that COSEE spend some time discussing and generating their external messaging.

NAC Recommendation 0911-07: As COSEE moves to implement the business plan, NAC recommends that any resulting Memorandums of Understanding are well thought out. It is clear that the CCO is already thinking about this as it is included in the implementation plan. Partnerships are an important part of COSEE and COSEE need to be sure that there are well defined criteria for the different levels and types of partnership being used by COSEE.

NAC Recommendation 0911-08: Particularly with the decadal review coming up, it is important for each center and the network as a whole to think more about catalytic aspects of COSEE. The fundamental scale of COSEE should be broader in the next decade and thinking about it now would be good. This does not necessarily mean just increasing the number of centers, it means going beyond the centers and sharing/disseminating COSEE efforts with the rest of the United States. How should this be accomplished given the current proposal and budgeting process?

NAC Recommendation 0911-09: Item #12 (“Develop concise list of expectations and responsibilities for Center PIs and staff (including “deep bench”) participation in Network level activities”) under Objective 1.3 of the three year implementation plan (2010-2012). This list of expectations and responsibilities should be shared with the NAC.

NAC Recommendation 0911-10: The NAC recommends that COSEE backmap to get the necessary data and information from the COSEE centers and using that data/information to generate the cornerstone claims (the ones that can be supported by data). This approach (when compared to the 54 claims that COSEE currently has) should reveal gaps for claims that COSEE thinks are important but that require data.

NAC Recommendation 0911-11: NAC recommends that a clearly articulated road map be developed and communicated by the network evaluator to ensure that everyone is heading in the same direction.

NAC Recommendation 0911-12: The NAC would like to request that any materials be provided to them two weeks in advance of the meeting.

NAC Recommendations (11/09) & Responses (5/10)

NAC Recommendations (November 2009) and Responses (May 2010)

ID	Description	Responsibility	Status
0911-01	NAC encourages COSEE to leverage the OSB/Smithsonian Institution relationship to increase exposure and advertising for a COSEE lecture series.	MMWG	This was investigated and after discussions with Elizabeth Ban, it has been decided that COSEE will be branded in the Ocean Hall lecture series that will begin June 6. It would be confusing for the SI to also associate COSEE with their other lecture series.
0911-02	The NAC members would like to become more involved with the COSEE working groups as observers, which will help the NAC become more knowledgeable about COSEE and serve as better ambassadors for the program.	NAC	NAC members have "adopted" Working Groups.
0911-03	The NAC recommends that the Strategic Business Plan Working Group continue as an operational/planning group.	Spitzer	This makes sense, but Decadal Review assignments are consuming available NCN resources for now.
0911-04	NAC will form an "ad-hoc" working group (Sally, Dan, Kelly, and Carroll) to really focus on fundraising. It will be an agenda item for the May 2010 network meeting. NAC feels that 2012 is too far away and that this is too important of a topic to wait.	NAC	To be discussed at May 2010 NAC meeting.
0911-05	The Mission statement needs to be concise and inclusive. NAC suggests the following: "Engaging scientists and educators to transform ocean sciences education for all."	Spitzer	Suggest that further wordsmithing of mission/vision wait until after November 2010 community visioning workshop, since this may generate new insights.
0911-06	NAC recommends that COSEE spend some time discussing and generating their external messaging.	CCO	This makes sense, but Decadal Review assignments are consuming available resources for now. Also, suggest that further wordsmithing of mission/vision wait until after November 2010 community visioning workshop, since this may generate new insights.
0911-07	As COSEE moves to implement the business plan, NAC recommends that any resulting Memorandums of Understanding are well thought out. It is clear that the CCO is already thinking about this as it is included in the implementation plan. Partnerships are an important part of COSEE and COSEE need to be sure that there are well defined criteria for the different levels and types of partnership being used by COSEE.	CCO	We are actively working on partnerships, however, no MOUs have been written. We are developing a joint NSF proposal with the American Meteorological Society and this is our first formal proposal with another organization.

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NAC Recommendations (11/09) & Responses (5/10)

NAC Recommendations (November 2009) and Responses (May 2010)

0911-08	Particularly with the Decadal Review coming up, it is important for each Center and the Network as a whole to think more about catalytic aspects of COSEE. The fundamental scale of COSEE should be broader in the next decade and thinking about it now would be good. This does not necessarily mean just increasing the number of Centers; it means going beyond the Centers and sharing/disseminating COSEE efforts with the rest of the United States. How should this be accomplished given the current proposal and budgeting process?	CCO	This is a good topic for the community visioning workshop in November 2010.
0911-09	Item #12 ("Develop concise list of expectations and responsibilities for Center PIs and staff (including "deep bench" participation in Network level activities") under Objective 1.3 of the three year implementation plan (2010-2012). This list of expectations and responsibilities should be shared with the NAC.	CCO	The expectations and Center responsibilities will be completed by the new Executive Committee following the May meeting. The first step, a list of expectations and responsibilities for Center evaluators has been completed and can be found at http://www.cosee.net/programdocuments/ .
0911-10	The NAC recommends that COSEE backmap to get the necessary data and information from the COSEE centers and using that data/information to generate the cornerstone claims (the ones that can be supported by data). This approach (when compared to the 54 claims that COSEE currently has) should reveal gaps for claims that COSEE thinks are important but that require data.	EWG/NNE	Cornerstone claims have been refined and will be distributed to the NAC prior to the May meeting.
0911-11	NAC recommends that a clearly articulated road map be developed and communicated by the Network evaluator to ensure that everyone is heading in the same direction.	NNE	Should be addressed by NNE documents and presentation at May 2010 NAC meeting.
0911-12	The NAC would like to request that any materials be provided to them two weeks in advance of the meeting.	Spitzer	Achieved for May 2010 meeting.

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May 5, 2010

National Advisory Committee (NAC):

Jean Egmon* Kellogg School of Management, Northwestern University

Sara Espinoza National Environmental Education Foundation

Carroll Hood (Vice-Chair) Raytheon

M. Brandon Jones¹ Environmental Protection Agency

Gordon Kingsley (Chair)¹ Georgia Institute of Technology

Kelly Kryc Gordon and Betty Moore Foundation

Mike Loudin ExxonMobil

George Matsumoto (Secretary) Monterey Bay Aquarium Research Institute

Carolyn Randolph National Science Teachers Association

Sally Goetz Schuler National Science Resources Center

Carolyn Thoroughgood¹ University of Delaware

Cindy L. Van Dover Duke University

Dan Whaley* Climos

*Participated via telephone

¹Absent

Observers and Guests

Don Elthon National Science Foundation

Mark St. John Inverness

Billy Spitzer New England Aquarium

The National Advisory Council would like to express our great sorrow and condolences to Craig Strang and his family in this time of their great loss.

The NAC and Don Elthon had an excellent discussion centering on the America Competitiveness Council and how COSEE and NSF might address the budget limitations imposed by the ACC. We also discussed the National Network Evaluation and the some issues about COSEE in general.

Billy Spitzer went over all the recommendations from November 2009 and discussed either the action taken or why there was no action taken. It was noted that the NAC hasn't kept track of previous recommendations and will do so at our next meeting. Gordon also asked Billy to think about and try and answer the question: "If COSEE were to go away, what will happen?" Is there anything that would disappear? Billy answered briefly and then went away for a few hours and came back with some more thoughts on this question. The NAC thought that continued thinking about this question will help the evaluators as well as the decadal report working group.

All of the reported contacts between NAC members and their 'adopted' centers were very positive. In person visits have been made and NAC members have also visited the websites for their centers. This is working out very well. Reports from NAC members involved with the various working groups have not been as positive. Some of the working groups have been active

and have integrated NAC members and these interactions have been positive. Some of the working groups appear to be inactive or at least there has not been any contact with the NAC member.

Mark St. John gave the NAC an excellent overview of the National Network Evaluation. There were numerous discussions and questions/answers. There was a lengthy discussion about the sustainability potential for COSEE and there is a document containing notes from a teleconference held by the ad hoc working group that will be provided for inclusion on the internal COSEE.net website.

We would like to express our deepest appreciation to Gordon Kingsley for his leadership and guidance as NAC chair 2009-2010 and to Bob Corell for his service on the NAC (2008-2010).

The NAC has also appointed new offices for 2010-2011 (term ending May 2011). Carroll Hood is Chair; Sara Espinoza is vice-Chair, and George Matsumoto is Secretary.

Specific Recommendations

NAC ACC Recommendation 0505-01: The NAC recommends that COSEE really examine the data quality and metrics used to measure outcomes. We suggest that COSEE look at the NOAA B-WET evaluation plan as an example of an evaluation plan that focuses more on outcomes than numbers and is both qualitative and quantitative and meets ACC standards.

NAC Education Recommendation 0505-02: COSEE needs to tap into Phil's (OLC) expertise and network with regard to education research. It is important to launch ongoing research studies for continuous improvement.

NAC Working Group Recommendation 0505-03: Please have each working group contact the interested NAC member so that we can participate in any discussions. Lack of contact implies that there is nothing happening.

NAC Diversity Working Group Recommendation 0505-04: We recommend that COSEE reconvenes the Diversity Working Group and makes Diversity a high priority within the COSEE enterprise. This is an issue that should be front and center in all the evaluation reports.

NAC Strategic Business Plan Recommendation 0505-05: The NAC recommends that this group continue as an operational/planning group. The de-emphasis on this group is not something that the NAC supports. The leadership and accountability deliverables have not been addressed in the AOP and these are important items.

NAC National Network Evaluation Plan Recommendation 0505-06: The NAC feels strongly that we urgently need insight into the transformative analytics and model to be used for translating survey results into findings.

NAC Fund Raising Recommendation 0505-07: Dan would be happy to work with CCO and/or the centers on this process. It is never really too early to start working on contacts and planting

the seed. There are a couple of short-lived opportunities that require immediate attention. It would be good to review the phone call summary as well in terms of potential ideas and thoughts

NAC DRWG Recommendation 0505-08: The NAC feels strongly that the Decadal Review needs to include the baseline (before COSEE) and lessons learned (positive and negative).

NAC Decadal Review Recommendation 0505-09: The NAC is willing and eager to provide input as these documents are being written, but this will require providing the outlines and drafts to the NAC as they are being developed.

NAC Decadal Review Recommendation 0505-10: There needs to be a discussion on how these documents will be assembled and this discussion should take place soon (definitely before the November meeting). Perhaps NSF might be willing to invest in a professional writer to work with the three groups in integrating all three documents AND especially important in writing the brochure/policy brief (distilled, tells the full story, integrates the three documents).

NAC Cornerstone Claims Recommendation 0505-11: COSEE should map the cornerstone claims to their objectives to ensure a good match.

NAC Action Items:

Any NAC members rotating off in 2011 that are interested in continuing to serve should contact Carolyn Randolph directly.

The secretary shall keep track of all NAC recommendations from past meetings and any actions taken. The secretary shall bring any NAC recommendations not acted upon to the attention of the NAC at the next meeting.

NAC members will provide (to George to gather) names and summaries of suggested participants for November workshop. George will forward to Cheryl, Romy, and NSF.

The NAC will help dissemination of the request for white papers for the futures workshop in November.

The NAC will continue to address the question of “what should (or should not) be COSEE priorities and goals for the next decade, if continued funding is provided by NSF” at our next NAC meeting

The NAC will continue to address the question of “what are the optimal funding levels for COSEE centers and how might the Network organizational structure be improved” at our next NAC meeting

The NAC will continue to address the question of “comments on any other subjects” at our next NAC meeting